



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,927	04/24/2007	Matheus Zadnikar	05523.0003.PCUS00	5544
32894	7590	08/03/2010		
HOWREY LLP-EU C/O IP DOCKETING DEPARTMENT 2941 FAIRVIEW PARK DR., SUITE 200 FALLS CHURCH, VA 22042			EXAMINER THOMPSON, BRADLEY E	
			ART UNIT	PAPER NUMBER
			2612	
			MAIL DATE	DELIVERY MODE
			08/03/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,927	Applicant(s) ZADNIKAR, MATHEUS	
	Examiner BRADLEY E. THOMPSON	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9,14-21,23-25,29 and 36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9,14-21,23-25,29 and 36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. This is in response to the applicant's remarks filed on 04/13/2010.

Claims 1, 7, 14 are amended and claims 8, 10-13, 22, 26-2830-35 are canceled. Claim 36 is new. Therefore, claims 1-7, 9, 14-21, 23-25, 29, 36 are presented for examination.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Drawings

2. The drawings submitted on 04/07/2006 are acknowledged.

Response to Arguments

1. Applicant's arguments with respect to claims 1, 14 have been considered but are moot in view of the new ground(s) of rejection.
2. Applicant's arguments filed 04/13/2010 have been fully considered but they are not persuasive.

Claim 29:

Applicant's argument is directed to features of Tsai, e.g. UPS units arranged on a parallel bus, which are not relevant to the claimed subject matter. The salient point is that Marais

Art Unit: 2612

discloses UPS and Tsai discloses UPS and an isolation transformer; hence, it would be obvious to combine with the two for the reasons cited in claim 29.

Response to Amendment

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-7, 14-17, 19-21, 23, 25, 29, 36** rejected under 35 U.S.C. 103(a) as being unpatentable over Marais (WO Patent Application Pub WO-00/68908, cited in PTO-1449) in view of Tsai et al. (US Patent Application Pub 2005/0043859; Tsai).

In consideration of independent **claim 1**:

Marais is drawn to a surveillance system for a plant worksite (page 1 paragraph 1). He exhibits a confined space 12, e.g., a vessel with manhole openings 14A-D which is the object of surveillance (figure 1) (page 4 paragraph 1) (reads on a method of monitoring personnel operating at a workplace within a confined space).

Marais exhibits multiple remote surveillance stations 10A-N (figure 2) with video cameras 16 (figure 1), mounted cameras 42 (reads on mounting the modules at least partially within the confined space) and mobile cameras 38 (page 6 paragraph 5). Marais recites wherein

Art Unit: 2612

cameras 42 are “mounted at strategic locations in the area 40 and are remotely controllable from the central station 32 (figure 2) (page 5 paragraph 1) (reads on selectively configurable).

In a field of similar field of endeavor, Tsai is directed to a UPS system and control method (paragraph 2). He teaches wherein it is possible to connect an isolation transformer to the AC output bus (figure 2) in order to step down the voltage for low voltage applications (paragraph 69).

Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the UPS of Marais with the low voltage isolation transformer, as taught by Tsai, in order to provide low voltage and to decouple the two sources thereby substantially reducing interference. It is obvious that surveillance stations 20 require multiple outlets.

Marais discloses wherein central control room may be fixed or mobile. Marais further teaches a multi-channel video recorder for recording video images (page 5 paragraph 4), an audio means for emitting sounds (page 5 paragraph 5) (page 6 paragraph 4) and a means for detecting hazardous gases (page 2 paragraph 6). He discloses a means for maintaining a “complete visual and audio record of all activities at each hazardous location” (page 8 paragraph 4) which suggests apparatus for receiving audio input is included in sensor 24 (figure 1) (reads on, for each workplace, providing a selectively configurable mobile workplace module comprising a video registration device producing video data, an audio interface for emitting and receiving audio data and a gas sensor to produce gas sensor data and an isolation transformer supplying low voltage electrical power).

Marais exhibits sensors 24 at each manhole opening to a vessel 12 (figure 1) and a remote surveillance station 20 disposed outside the vessel. He exhibits cameras 16 outside the vessel

Art Unit: 2612

which are trained on the openings, gas detectors included in sensors 24 (page 6 paragraph 4) and an audible signal means for alerting personnel (page 6 paragraph 4). An audio input means is inherently disclosed per the complete audio record disclosure as cited above (reads on providing a mobile monitoring unit outside the confined space, the monitoring unit comprising a display for displaying video data from the workplace modules, an audio interface for emitting and receiving audio data and a gas data receiver for receiving gas sensor data).

Marais exhibits communication links 34 (figure 2) for passing data to the central control station (page 4 paragraph 4) (reads on connecting the workplace modules for signal transfer to a transmitting station; transmitting data from the transmission station to the monitoring unit).

Marais recites the activities of workmen that can be monitored and directed by the central control room (page 8 items 1-7) (reads on monitoring, at the monitoring unit, the operation of personnel in the workplace).

In consideration of **claim 2**:

The methods of Marais disclose all as applied above (see claim 1). Marais teaches whereby workers may carry transponders which are interrogated to indicate the identity and presence of the worker (page 6 paragraph 1) (reads on wherein workplace module comprises a presence detector and the method further comprises detecting the presence of a person at the workplace).

In consideration of **claim 3**:

The methods of Marais disclose all as applied above (see claim 2). Marais teaches wherein data is automatically collected on which worker enters and exits a vessel and the data is transmitted to a logging device 64 in control room 32 (figure 3) (page 6 paragraph 1) (reads on

Art Unit: 2612

wherein the presence detector comprises a workplace access registration device and the method further comprises registering the entry and exit of personnel into the confined space).

In consideration of **claim 4**:

The methods of Marais disclose all as applied above (see claim 2). As discussed in the rejection of claims 2 and 3, Marais teaches detection of worker identity (reads on wherein the presence detector comprises an identification device and the method further comprises identifying a person at a workplace and providing the identity to the monitoring unit).

In consideration of **claim 5**:

The methods of Marais disclose all as applied above (see claim 1). As discussed in the rejection of claim 1, Marais exhibits a multichannel video recorder 52 (figure 3) (reads on further providing a recording device for recording data transmitted to the monitoring unit).

In consideration of **claim 6**:

The methods of Marais disclose all as applied above (see claim 1). Marais teaches whereby an alarm signal is generated as a result of the emission of dangerous gas. The method of comparing the reading from a gas sensor to a threshold is inherently disclosed since, otherwise; there would be no basis for generating an alarm (reads on further comparing gas sensor data with predefined gas data limits and generating a warning in the event that the gas data limits are exceeded).

In consideration of **claim 7**:

The methods of Marais disclose all as applied above (see claim 1). As discussed in the rejection of claim 1, Marais recites “Sensors may be provided *at each location* for detecting

Art Unit: 2612

unwanted or dangerous events, for example, the presence of dangerous or noxious gases” (reads on wherein a gas is provided at a first workplace).

In consideration of **claim 9**:

The methods of Marais disclose all as applied above (see claim 1). As discussed in the rejection of claim 1, Marais exhibits mounted cameras within a confined workspace. Further, these cameras may be operated from central station 32 in pan, tilt and zoom modes (page 5 paragraph 1) (reads on wherein the video registration device is controllable from the mobile monitoring unit and the method further includes controlling the video registration device to zoom, pan or tilt).

In consideration of independent **claim 14**:

The methods of Marais disclose everything. Claim 14 is interpreted and thus rejected for the same reasons put forth in the rejection of claim 1 since the system is an inherent variation of the method. Further, central control station 32, which may be mobile, includes multiple monitors 50 for displaying video images from the various camera locations (page 5 paragraph 2) (reads on a mobile monitoring unit selectively connectable to receive data transmission from the transmitting station to the workplace modules for data transmission between the workplace module and the monitoring unit; the monitoring unit comprising a display for displaying video data from the workplace module).

In consideration of **claim 15**:

The system of Marais discloses all as applied above (see claim 14). Claim 15 is interpreted and thus rejected for the same reasons put forth in the rejection of claim 2 since the system is an inherent variation of the method.

Art Unit: 2612

In consideration of **claim 16**:

The system of Marais discloses all as applied above (see claim 15). Claim 16 is interpreted and thus rejected for the same reasons put forth in the rejection of claim 3 since the system is an inherent variation of the method.

In consideration of **claim 17**:

The system of Marais discloses all as applied above (see claim 16). Claim 17 is interpreted and thus rejected for the same reasons put forth in the rejection of claim 4 since the system is an inherent variation of the method.

In consideration of **claim 19**:

The system of Marais discloses all as applied above (see claim 14). Claim 19 is interpreted and thus rejected for the same reasons put forth in the rejection of claim 5 since the system is an inherent variation of the method.

In consideration of **claim 20**:

The system of Marais discloses all as applied above (see claim 14). Claim 20 is interpreted and thus rejected for the same reasons put forth in the rejection of claim 6 since the system is an inherent variation of the method.

In consideration of **claim 21**:

The system of Marais discloses all as applied above (see claim 14). Marais recites “Sensors may be provided *at each location* for detecting unwanted or dangerous events, for example, the presence of dangerous or noxious gases” (page 2 paragraph 6) (reads on wherein the gas sensor is a direct gas sensor for location at the workplace).

In consideration of **claim 23**:

Art Unit: 2612

The system of Marais discloses all as applied above (see claim 14). Marais exhibits cable links 34 (figure 2) which tie surveillance stations 10 to central control 32 (page 4 paragraph 4) (reads on comprising a mobile umbilical cable connecting the workplace modules to the monitoring unit).

In consideration of **claim 25**:

The system of Marais discloses all as applied above (see claim 14). Marais exhibits multiple cameras on each remote surveillance station 20 (figure 2) (reads on wherein the workplace modules comprise a plurality of video registration devices).

In consideration of independent **claim 29**:

As discussed in the rejection of claim 1, Marais relates to a surveillance system for a plant worksite with multiple sensors (reads on a selectively configurable workplace module for a safety monitoring system comprising a workplace unit and a plurality of sensors).

Marais recites “Information produced by the various sensors, movement detectors, card readers and the like is initially collected at each respective remote control surveillance stations 20 which then transmit the information to the central control room 32” (page 7 paragraph 1) (reads on the workplace unit comprising a plurality of data interfaces for receiving data from the sensors and transmitting data to the safety monitoring system).

He discloses a UPS 70 (uninterruptible power supply) (figure 2) (page 7 paragraph 5) as a power supply means. However, he fails to disclose an isolation transformer.

Tsai teaches wherein it is possible to connect an isolation transformer to the AC output bus (figure 2) in order to step down the voltage for low voltage applications (paragraph 69).

Art Unit: 2612

Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the UPS of Marais with the low voltage isolation transformer, as taught by Tsai, in order to provide low voltage and to decouple the two sources thereby substantially reducing interference. It is obvious that surveillance stations 20 require multiple outlets (reads on a plurality of power outlets for providing electrical power to the sensors and an isolation transformer for supplying the power outlets with low voltage electrical power).

In consideration of **claim 36**:

Marais discloses network links (figure 2) to the remote surveillance station which are typically internet links which are governed by TCP/IP protocol (reads on whereby the workplace unit is adapted to transmit data to the safety monitoring system under TCP/IP protocol).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 18, 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Marais.

In consideration of **claim 18**:

The system of Marais discloses all as applied above (see claim 16). Marais teaches "signal apparatus responsive to the detector devices for providing a signal when movement is detected" (page 2 paragraph 2). He further teaches signaling, based on movement, when

Art Unit: 2612

someone enters or exits the workplace (page 5 paragraph 5). It is obvious to one of ordinary skill in the art that such a signal, as taught by Marais, can be used to switch on cameras upon entry and switch them off upon exit thereby conserving power (reads on wherein the monitoring workplace modules have an active state and a passive state, and the presence detector is active to cause transition of the workplace modules from the passive state to the active state in response to the detection of a person at the workplace).

In consideration of **claim 24**:

The system of Marais discloses all as applied above (see claim 23). As discussed in the rejection of claim 23, Marais exhibits video cables. It is obvious to one of ordinary skill in the art to use fiber-optic cable, which is in wide use for carrying video data, as the cable link taught by Marais since it provides very high data rate.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2612

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRADLEY E. THOMPSON whose telephone number is (571)270-5583. The examiner can normally be reached on M-F 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Bugg can be reached on 571-272-2998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BRADLEY E THOMPSON
Examiner
Art Unit 2612

/BET/

/George A Bugg/

Supervisory Patent Examiner, Art Unit 2612